

CADD

Computer Aided Design & Drafting

SST
100

ID 318

PNY

Introduction To AutoCAD Level I

Course Syllabus

Class Meetings: Monday & Wednesday 12:00pm - 3:00pm

Class Location: Eiben Hall Room 106

Instructor: Villy J. Negre

Course Credits: 3 Semester Credits

Office Hours: By Appointment Only

Phone: 944-5090 (Office)
479-5100 (Cell)

Text: To be discussed.

Supplemental Text: "AutoCAD Inside & Out"
By: Lynn Allen

Supplemental Prgm: AutoCAD LT 97 For Windows (Verify Availability)
AutoCAD LT 2000 (Verify Educational Pricing)
Available thru Computer Aided Technologies International

Overview:

This course will target the world of Computer Aided Design & Drafting (CADD) and how it is used more & more today by design professionals around the world. The focus in this course will be about how CADD is an essential communications tool for Interior Design. AutoCAD LT 97 & LT 2000 is the 2D equivalent to AutoCAD Release 14 & recently released AutoCAD 2000, and is probably the most cost effective and productive industry program suitable for interior designers today.

This course aims to give students a thorough introductory understanding of and a hands-on competency in AutoCAD LT, which will be presented in a format familiar to both design students and practicing interior designers.

Areas in which the class will focus on will mainly be based on the basic understanding of common commands, techniques & implementation into Interior Design.

Course Syllabus

Course Outline: Class exercise, assignments & discussions.....30%
Notebook.....10%
Quizes.....10%
Midterm.....20%
Final.....30%

Course Grading: A=100-90%
B= 89-80%
C= 79-70%
D= 69-60%
F= 60% & Below

Attendance: Attendance is mandatory. 1 unexcused absence result in two missed classes. Two unexcussed absence may result in grade reduction.

Expectations! The ability to grasp the subject will reflect upon the students active participation, individual responsibility & cooperative effort.

Students will be expected to:

- * Be prepared for class.
- * Use proper grammar and neatness when turning in assignments either typed or hand written..
- * Turn off all phones and or pagers during class.

AutoCAD LT[®] 97/98

Fundamentals

1. Getting Started

Communicating With AutoCAD	
Starting & Closing AutoCAD	3
Pulldown Menus	5
Toolbar Icon Buttons	6
Keyboard Input & Responding To Prompts	7
Graphics & Text Windows	8
In Case of Emergency...	
Canceling Commands In Progress	9
Using U & REDO	10
Accessing On-Line Help	11
Creating & Managing Drawing Files	
Managing Projects In Folders	12
Making New Drawings	13
Opening Existing Drawings	14
Saving Changes To Drawing Files	15
Backing Up Drawing Files	16
Quick Tour Hands-On	17

2. Display Commands

Drawing Scale	
Manual Drawings & Scale	3
AutoCAD & Scale	4
Basic Display Commands	
Zoom Window	5
Zoom Previous	9
Zoom Extents	11
Zoom Scale	14
Zoom Realtime & Pan	17
Saving & Restoring Views	26

3. CAD Tools & Drawing Setup

Inputting Points	
Absolute Coordinates	3
Relative Coordinates	7
Polar Coordinates	9
Object Snap Overrides	11
Running Object Snaps & AutoSNAP	17
Using Ortho Like A T-Square	26
Direct Distance Entry	30
Drawing Units & System Variables	32
Snap, Grid & Limits	37
Polar Snap	44
User & World Coordinates	47
Inquiry Tools For Points	51
Drawing Setup	
Using A Wizard	52
Using Template Files	55
Starting From Scratch	60

4. Basic Draw Commands

Creating Lines	
LINE, PLINE or DLINE?	3
Backing Up With LINE Running	6
Closing The Polygon	8
Continue Where You Left Off	10
Creating Arcs & Circles	
The ARC Command	14
The CIRCLE Command	17
Creating Points	
What Is A Point?	19
Changing Point Styles	22
Using Points In MEASURE & DIVIDE	25
Introduction To Polylines	
Creating Polylines	29
Editing Polylines	33

5. Basic Edit Commands

ERASE & OOPS	3
Creating Selection Sets For Edit Commands	6
MOVE & COPY	16
ROTATE	21
SCALE	23
Introduction To Grips	25

6. Introduction To Layers

Layers & AutoCAD	
What Are Layers?	3
Why Have Layers?	4
Defining & Managing Layers	
The Current Layer	5
On & Off	9
Freeze & Thaw	11
Making New Layers	14
Assigning Colors & Linetypes	17
Changing Properties Of Existing Objects	26

7. CAD Construction Techniques

OFFSET Makes Parallel Objects	3
TRIM Is Like A Cookie Cutter	8
EXTEND Makes Objects Longer	12
FILLET Is An Easier Way To Make Arcs	14
CHAMFER Breaks Sharp Corners	17
ARRAY Generates Repeating Patterns	21
MIRROR Generates Symmetrical Features	27
STRETCH Combines MOVE & EXTEND Or TRIM ..	30
Making Orthographic Views	32
Supplementary Exercises	39

8. Creating Text & Defining Styles

Single Line Text Objects	3
Creating Text Styles	11
Editing Existing Text Objects	20
Introduction To Multiline Text Objects	23

9. Blocks & Drawing Import/Export Options

What Is A Block?	3
Why Use Blocks?	4
Making Block Definitions	5
Inserting Block Definitions & Drawing Files	13
Cut & Paste Using The Windows Clipboard	22
Exporting Blocks & Objects To Drawing Files	25
Introduction To External References	33
Introduction To Using The Content Explorer	39

10. Introduction To Dimensions

What Is A Dimension?	3
Dimensions Relating To Distance	4
Ordinate Dimensions	13
Angular Dimensions	18
Creating Leaders	20
Dimensioning ARCS & CIRCLES	22
Introduction To Dimension Styles	24
Supplementary Exercises	34

11. Crosshatching

Defining The Boundary	3
HATCH Parameters	11
Changing Existing HATCH Objects	20

12. Plotting & Introduction To Paper Space

Output Devices	3
Configuring A Plot	4
Paper Space Basics	11

13. Changes Introduced In AutoCAD LT 98

Controlling Toolbar Display	3
Improvements To UNDO & REDO	4
More ARC & CIRCLE Pulldown Menu Options	5
New ARRAY Dialogue Box	6
New PURGE Tree View Interface	10
Drag & Drop Hatching	13
New REVCLLOUD Feature	16
New Features For Intermediate Users	18